

ABSTRACT OF THE DISCLOSURE

Fig. 1

Improved methods for using a dome-cap sensor wherein an elastomeric injection molded one-piece dome-cap of the sensor is positioned over a pressure-sensitive variable-conductance active element of the sensor which is positioned over proximal conductive elements of an electronic circuit. The dome-cap is variably depressible such as with a finger for transferring force of varying intensity into the active element to have the active element variably conductively connecting the proximal conductive elements. The electronic circuit is structured for reading the active element as being in any one of at least three readable states and preferably many readable states dependant upon pressure and amount of pressure applied to the active element. Relief of depressive force allows the dome-cap to resiliently return to a normal raised position and one which can be used to indicate the sensor as electrically open or deactivated. The injection molded dome-cap can provide a tactile feedback upon actuation of the sensor. Also disclosed is an improved analog sensing circuit including a user manipulable variable-conductance sensor, wherein the improvement comprises the variable-conductance sensor being an elastomeric injection molded dome-cap positioned over a pressure-sensitive variable-conductance material and variably depressible to variably compress the material; the variable-conductance material, at least when compressed, is contacting two proximal circuit elements, wherein the degree of compression determines the degree of conductivity of the variable-conductance material and thus the conductively between the two proximal circuit elements.